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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,486	07/16/2003	Erich Ronneberger	RONNEBERGER2	7277
1444	7590	04/15/2004	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			ROSS, DANA	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/619,486	RONNEBERGER, ERICH	
	Examiner	Art Unit	
	Dana Ross	3722	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-10 and 15-18 is/are rejected.
- 7) ☐ Claim(s) 4, 6 and 11-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: The disclosure, for example on page 3, line 13, refers to the claims by numbers. Applicant is required to amend the specification to remove these references and to incorporate into the disclosure the subject matter of these claims that is necessary to the understanding of the invention.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8, 9, 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8, 15 and 17, it is unclear if "coolant/lubricant" means "coolant and lubricant" or "coolant or lubricant". Clarification is required.

Claim 9, it is unclear if "the supply" refers to power, coolant and lubricant as a group, or to one individually. Clarification is required.

*Claim Rejections - 35 USC § 102 or 103*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5, 7, 10 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Pat. No. 4,584,794 (Hirohata).

Hirohata teaches a grinding machine with a bed 11, headstock 13 and tailstock 14 to support and rotate a work piece A along a longitudinal axis (col. 2, lines 24-30), a swivel head 30 with grinders B on the end front face (fig. 1) with a axis of rotation that intersects the longitudinal axis of the work A at right angles (col. 2, lines 63-65) with intermittent rotations depending on the method of machining used (col. 3, lines 3-9). This would include the swivel head swivellable through at least  $\pm 90^\circ$  and the rotation of the tools would include a displacement of the tools parallel to the swivel axis.

Though Hirohata does not explicitly disclose the work spindle being located on a first slide, the first slide is implicitly shown in figures 1 and 2 to accommodate the minimal ability to adjust and tighten the work piece onto the work piece spindle.

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However, in the alternative, if the work spindle does not have a first slide for longitudinal movement, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the work spindle with a first slide movable in a longitudinal direction parallel to the work piece and the tool carriage 15 stationary in the longitudinal direction parallel to the work piece since a reversal of parts has been held to only involve routine skill in the art. In this instance, the purpose for reversal of the spindle longitudinal movement with the longitudinal movement of the workpiece is to provide for the longitudinal machining of the workpiece.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,584,794 (Hirohata) in view of U.S. Pat. No. 5,697,739 (Lewis et al.). Hirohata teaches all aspects of the above claim 1 rejection. Hirohata teaches a motor 33 on the back of the swivel unit away from the work spindle. Though Hirohata shows what appears to be a nozzle in figure 1 directed near the tool units B, Hirohata does not expressly disclose the coolant or lubricant supply to tools units B.

Examiner notes that it is well known in the art to have the power supply, coolant and lubrication systems as well as signal exchange between tool units and a machine control system taken from the back of a unit. As evidence that it is well known in the art to run the supply lines through the tool head in a direction away from the work spindle, Lewis et al. teaches an attachment for a tool spindle wherein the nozzle 96 directs coolant onto the tool via coolant lines 98 which are centrally located and run through the tool spindle (col. 5, lines 38-42) and an electrical connector assembly with a male electrical connector 79 and a female connector 81 with

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an electrical cable 83 that extends from the bottom of the male electrical connector through a bore 85 (col. 5, lines 16-35) .

Therefore it would have been obvious to one of ordinary skill in the art to modify the grinder with multiple work tools B as taught by Hirohata to include the coolant and signal exchange as taught by Lewis et al. for the purpose of having a spindle assembly having a drive train drive train that is mechanically independent from the drive train of a movable spindle unit, for example (see Lewis et al. abstract).

***Allowable Subject Matter***

8. Claims 4, 6, 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 8-9 and 15-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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***Conclusion***

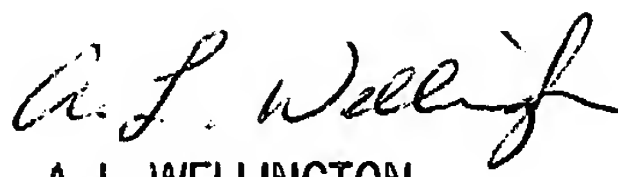
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is (703) 305-7764. The examiner can normally be reached on Mon-Fri 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmr

  
A. L. WELLINGTON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700